# Engineering Interpretations

### **Building Site Development**

Soil properties influence development of building sites, including the selection of the site, the design of the structure, construction, post construction performance, and maintenance. Soil limitation ratings of slight, moderate, and severe are given for shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns, landscaping, and golf fairways.

#### Shallow Excavations

Shallow excavations are trenches or holes dug in the soil to a maximum depth of 5 or 6 feet. They are used for pipelines, sewer lines, telephone and power transmission lines, basements, open ditches, and cemeteries. The ratings are based on the soil properties that influence ease of digging and resistance to sloughing.

### **Dwellings With or Without Basements**

These are single-family houses of three stories or less. The foundation is assumed to be spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or the depth of maximum frost penetration, whichever is deeper, for houses without basements, or at a depth of 7 feet if a basement is constructed. The ratings are based on properties affecting soil strength and settlement under a load, and those that affect excavation and construction costs.

### Small Commercial Buildings

Limitation ratings are given for the undisturbed soil on which small commercial buildings of less than three stories without basements are built. The foundation is assumed to be placed on spread footings of reinforced concrete at a depth of 2 feet or the depth of maximum frost penetration, whichever is deeper.

### Local Roads and Streets

Limitation ratings are given for the use of soils for construction of improved local roads and streets that have all-weather surfacing, commonly of asphalt, gravel with binder in it, or concrete, and that are expected to carry automobile traffic all year. These roads and streets are graded to shed water, and conventional drainage measures are provided. With the probable exception of the hard surface, roads and streets are built mainly from the soil at hand.

## Lawns, Landscaping, and Golf Fairways

The soils are rated for their use in establishing and maintaining turf for lawns and golf fairways and ornamental trees and shrubs for residential type landscaping. The ratings are based on the use of soil material at the location with some land smoothing. Irrigation may or may not be needed and is not a criterion in rating. Traps, trees, roughs, and greens are not considered as part of the golf fairway. The properties considered are those listed that affect plant growth and trafficability after vegetation is established.

This subsection includes:

• (a) Building Site Development

#### Building Site Development

Map symbol and soil name	  Dwellings without base   	ements	   Dwellings with basem   	ents	  Small commercial buil 	dings	   Local roads and str   	eets	   Lawns and landscar   	oing
	Rating class and limiting features	Value   	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value   	Rating class and limiting features	Value
2D: Goss	Moderately limited   ~slope   (moderately limited)   ~shrink-swell   (moderately limited)   ~large stones   (slightly limited)	0.60	   Moderately limited  ~slope   (moderately limited)  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)	0.60	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)	   1.00   0.45   0.22	  Moderately limited  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)  ~slope   (slightly limited)	    0.45    0.22    0.16	  Moderately limited  ~droughty   (moderately limited)  ~slope   (slightly limited)  ~too acid   (slightly limited)	0.40
2F: Goss	t = -	  1.00    0.45    0.26	  very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)	0.33	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)	  1.00    0.45    0.26	  very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)	  1.00    0.45    0.26	(very limited)	1.00     0.43     0.27
3: Twomile	  Limited  ~wetness   (limited)  ~shrink-swell   (moderately limited)	  0.99    0.45	  Very limited  ~wetness   (very limited)  ~shrink-swell   (slightly limited)	  1.00    0.14	  Limited  ~wetness   (limited)  ~shrink-swell   (moderately limited)	  0.60    0.45	  Limited  ~wetness   (limited)  ~shrink-swell   (moderately limited)	  0.60    0.45	  Limited  ~wetness   (limited) 	  0.60   
4D: Menfro	~slope (limited)	    0.76    0.45	  Limited  ~slope   (limited)  ~shrink-swell   (slightly limited)	    0.76    0.09	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	    1.00    0.45	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)	    0.63    0.45	  Limited  ~slope   (limited)	0.63
Goss	Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)	  0.76    0.45    0.22	Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)	  0.33 	  very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)	  1.00    0.45    0.22	Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)  ~large stones   (slightly limited)	  0.63    0.45    0.22	(moderately limited)	0.63

#### Building Site Development

Map symbol and soil name	  Dwellings without base	ements	   Dwellings with basem 	ents	  Small commercial buil	dings	Local roads and str	eets	   Lawns and landscap 	ping
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
6C: Crider	  Moderately limited  ~shrink-swell   (moderately limited)  ~slope   (slightly limited)	0.45	  Slightly limited  ~shrink-swell  (slightly limited)  ~slope  (slightly limited)	0.22	Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)	0.83	  Moderately limited  ~shrink-swell   (moderately limited)	    0.45   	    Not limited 	
6D2: Crider	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)	  0.76    0.45	  Limited  ~slope   (limited)  ~shrink-swell   (slightly limited)	  0.76    0.22	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)	  0.63    0.45	  Limited  ~slope   (limited)	0.63
6E: Crider	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)  ~shrink-swell   (slightly limited)	  1.00    0.22	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)	1.00
7B: Menfro	  Moderately limited  ~shrink-swell   (moderately limited)	    0.45   	  Slightly limited  ~shrink-swell   (slightly limited)	    0.25   	  Moderately limited  ~shrink-swell   (moderately limited)  ~slope   (slightly limited)	  0.45    0.15	  Moderately limited  ~shrink-swell   (moderately limited) 	    0.45   	  Not limited   	
7C: Menfro	  Moderately limited  ~shrink-swell   (moderately limited)  ~slope   (slightly limited)	  0.45    0.15	  Slightly limited  ~shrink-swell   (slightly limited)  ~slope   (slightly limited)	  0.17    0.15	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)	0.83	  Moderately limited  ~shrink-swell   (moderately limited) 	    0.45   	Not limited	

#### Building Site Development

Map symbol and soil name	  Dwellings without base   	ements	   Dwellings with basem   	ents	  Small commercial buil 	dings	Local roads and str	eets	   Lawns and landscap 	oing
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7D2: Menfro	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)	0.76	Limited  ~slope  (limited)  ~shrink-swell  (slightly limited)	0.76	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	1.00	Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)	0.63	  Limited  ~slope   (limited)	0.63
7E2: Menfro	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)  ~shrink-swell   (slightly limited)	  1.00    0.22	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)	1.00
7F: Menfro	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)	1.00
8C: Winfield	Moderately limited   ~shrink-swell   (moderately limited)   ~wetness   (slightly limited)   ~slope   (slightly limited)	  0.45    0.22    0.15	  Limited  ~wetness  (limited)  ~shrink-swell  (moderately limited)  ~slope  (slightly limited)	0.90	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)	0.83	  Moderately limited  ~shrink-swell   (moderately limited) 	  0.45     	  Not limited 	
8D: Winfield	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	  0.76    0.45    0.22	  Limited  ~wetness   (limited)  ~slope   (limited)  ~shrink-swell   (moderately limited)	  0.90  0.76    0.45	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45   	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)	  0.63    0.45 	  Limited  ~slope   (limited) 	0.63

#### Building Site Development

Map symbol and soil name	  Dwellings without base	ements	Dwellings with basem	ents	  Small commercial buil	dings	Local roads and str	eets	   Lawns and landscar 	ping
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
8E2: Winfield	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	  1.00    0.45    0.22	  Very limited  ~slope   (very limited)  ~wetness   (limited)  ~shrink-swell   (moderately limited)	      1.00    0.90    0.45	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	      1.00    0.45 	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	    1.00    0.45	  Very limited  ~slope   (very limited)	1.00
9E: Holstein	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  very limited  ~slope   (very limited)  ~shrink-swell   (slightly limited)	  1.00    0.08	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)  ~large stones   (slightly limited)	1.00
10F: Gasconade	Very limited   ~slope   (very limited)   ~depth to bedrock   (limited)   ~shrink-swell   (moderately limited)	  1.00    0.99    0.45	Very limited  -hard bedrock <40"   (very limited)  -slope   (very limited)  -large stones   (slightly limited)	  1.00    1.00    0.02	  Very limited  ~slope   (very limited)  ~depth to bedrock   (limited)  ~shrink-swell   (moderately limited)	  1.00    0.99    0.45	  very limited  ~slope   (very limited)  ~depth to bedrock   (limited)  ~shrink-swell   (moderately limited)	  1.00    0.99    0.45	Very limited   -slope   (very limited)   -droughty   (very limited)   -depth to bedrock   (limited)	  1.00    1.00    0.99
Rock outcrop	Not rated		  Not rated 	   	Not rated 		  Not rated 	     	Not rated 	
11: Dockery	   Very limited   ~flooding   (very limited)   ~wetness   (moderately limited)	    1.00    0.59	  Very limited  ~flooding   (very limited)  ~wetness   (very limited)	    1.00    1.00	  Very limited  ~flooding   (very limited)  ~wetness   (slightly limited)	      1.00    0.28	  Very limited  ~flooding   (very limited)  ~wetness   (slightly limited)	    1.00    0.28	  Moderately limited  ~flooding   (moderately limited)  ~wetness   (slightly limited)	0.60

#### Building Site Development

Map symbol and soil name	Dwellings without bas	ements	Dwellings with basem   	ents	Small commercial build 	dings	Local roads and str	eets	Lawns and landscap	oing
	Rating class and limiting features	Value	Rating class and limiting features	Value   	Rating class and limiting features	Value   	Rating class and limiting features	Value	Rating class and limiting features	Value
12: Kennebec	  Very limited  ~flooding   (very limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	    1.00    0.45    0.01	  Very limited  ~flooding   (very limited)  ~wetness   (limited)  ~shrink-swell   (moderately limited)	  0.61    0.45	  Very limited  ~flooding   (very limited)  ~shrink-swell   (moderately limited)	    1.00    0.45	  Very limited  ~flooding   (very limited)  ~shrink-swell   (moderately limited)	    1.00    0.45 	  Moderately limited  ~flooding   (moderately limited)	0.60
13: Auxvasse	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	    1.00    0.99	  very limited  ~wetness  (very limited)  ~shrink-swell  (limited)	    1.00    0.71	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	    1.00    0.60	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	    1.00    0.60	  Limited  ~wetness   (limited)	0.60
22F: Gatewood	Very limited   ~shrink-swell   (very limited)   ~slope   (very limited)   ~depth to bedrock   (moderately limited)	  1.00    1.00  0.53	Very limited  -hard bedrock <40"  (very limited)  -slope  (very limited)  -shrink-swell  (very limited)	  1.00    1.00    1.00	  Very limited  ~slope   (very limited)  ~shrink-swell   (very limited)  ~depth to bedrock   (moderately limited)	  1.00    1.00    0.53	  Very limited  ~low strength   (very limited)  ~slope   (very limited)  ~shrink-swell   (very limited)	  1.00    1.00    1.00	(very limited)  ~droughty   (limited)	  1.00    0.62    0.46
Gasconade	  Very limited  ~hard bedrock <20"   (very limited)  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    1.00    0.45	Very limited  -hard bedrock <40"   (very limited)  -slope   (very limited)  -shrink-swell   (slightly limited)	  1.00    1.00    0.10	  Very limited  ~hard bedrock <20"   (very limited)  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    1.00    0.45	 	  1.00    1.00    0.45	  very limited  ~slope   (very limited)  ~shallow to bedrock   (very limited)  ~droughty   (very limited)	  1.00    1.00    1.00
Crider	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited) 	    1.00    0.45 	  Very limited  ~slope   (very limited)  ~shrink-swell   (slightly limited)	    1.00    0.22 	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)  ~low strength   (very limited)  ~shrink-swell   (moderately limited)	  1.00    1.00    0.45	  Very limited  ~slope   (very limited)	  1.00     

#### Building Site Development

Map symbol and soil name	  Dwellings without base	ements	   Dwellings with basem 	ents	  Small commercial buil 	dings	Local roads and str	eets	   Lawns and landscap 	ping
	Rating class and limiting features	Value   	Rating class and limiting features	Value   	Rating class and limiting features	Value   	Rating class and limiting features	Value   	Rating class and limiting features	Value
24D2: Keswick	Very limited  -shrink-swell  (very limited)  -slope  (limited)  -wetness  (moderately limited)	        0.76    0.59	Very limited  ~shrink-swell  (very limited)  ~wetness  (very limited)  ~slope  (limited)	    1.00  1.00    0.76	Very limited  ~slope (very limited)  ~shrink-swell (very limited)  ~wetness (slightly limited)	    1.00    1.00    0.28	  Very limited  ~shrink-swell  (very limited)  ~slope  (limited)  ~wetness  (slightly limited)	    1.00    0.63    0.28	  Limited  ~slope   (limited)  ~wetness   (slightly limited)	0.63
27C: Armster	  Very limited  ~shrink-swell   (very limited)  ~wetness   (slightly limited)  ~slope   (slightly limited)	  1.00    0.22    0.15	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)  ~slope   (slightly limited)	  1.00    0.90    0.15	  Very limited  ~shrink-swell   (very limited)  ~slope   (limited)	1.00	  Very limited  ~shrink-swell   (very limited) 	1.00	  Not limited   	
31C: Hatton	   Moderately limited   ~wetness   (moderately limited)   ~shrink-swell   (moderately limited)   ~slope   (slightly limited)	0.45	  Very limited  ~wetness   (very limited)  ~shrink-swell   (slightly limited)  ~slope   (slightly limited)	  1.00    0.20    0.15	Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	0.83	  Moderately limited  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	  0.45    0.13 	  Slightly limited  ~wetness   (slightly limited)	0.13
34E: Lindley	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Very limited  ~slope   (very limited) 	1.00

#### Building Site Development

Map symbol and soil name	  Dwellings without base	ements	   Dwellings with basem 	ents	  Small commercial buil	dings	Local roads and str	eets	   Lawns and landscap 	oing
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
35B: Mexico	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	      1.00    0.99	  Very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	1.00	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)  ~slope   (slightly limited)	    1.00    0.60    0.15	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	      1.00    0.60	  Limited  ~wetness   (limited)	0.60
37: Marion	  Very limited  ~shrink-swell  (very limited)  ~wetness  (limited)	    1.00    0.99	  Very limited  ~wetness   (very limited)  ~shrink-swell   (limited)		  very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	    1.00    0.60	  Very limited  ~shrink-swell   (very limited)  ~wetness   (limited)	    1.00    0.60	  Limited  ~wetness   (limited)	0.60
40: Westerville	Moderately limited   ~wetness   (moderately limited)	      0.59 	  Very limited  ~wetness   (very limited)	    1.00 	  Slightly limited  ~wetness   (slightly limited)	      0.28	  Slightly limited  ~wetness   (slightly limited)	      0.28	  Slightly limited  ~wetness   (slightly limited)	0.28
41: Freeburg	Moderately limited   ~wetness   (moderately limited)   ~shrink-swell   (moderately limited)	  0.51    0.45	  Very limited  ~wetness   (very limited)  ~shrink-swell   (moderately limited)	0.45	  Moderately limited  ~shrink-swell   (moderately limited)  ~wetness   (slightly limited)	0.45	   Moderately limited   ~shrink-swell   (moderately limited)   ~wetness   (slightly limited)	  0.45    0.13	  Slightly limited  ~wetness   (slightly limited)	0.13
43: Cedargap	  Very limited  ~flooding   (very limited)	    1.00   	  Very limited  ~flooding   (very limited) 	1.00	  Very limited  ~flooding   (very limited) 	    1.00   	  Very limited  ~flooding   (very limited) 	  1.00     	  Moderately limited  ~flooding   (moderately limited)  ~droughty   (slightly limited)	0.60

#### Building Site Development

Map symbol and soil name	Dwellings without bas	ements	Dwellings with basem	ents	Small commercial buil   	dings	Local roads and str	eets	Lawns and landscap	ing
	Rating class and limiting features	Value 	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
44: Sensabaugh	  Very limited  ~flooding   (very limited)	1.00	Very limited -flooding (very limited) -wetness (slightly limited)	1.00	  Very limited  ~flooding   (very limited) 	1.00	  Very limited  ~flooding   (very limited)	1.00	  Moderately limited  ~flooding   (moderately limited)	0.60
48A: Weller	  Very limited  ~shrink-swell   (very limited)  ~wetness   (slightly limited)	  1.00    0.29	Very limited -shrink-swell (very limited) -wetness (limited)	  1.00    0.95	  Very limited  ~shrink-swell   (very limited)	  1.00   	  Very limited  ~shrink-swell   (very limited)	1.00	  Not limited   	
48B: Weller	  Very limited  ~shrink-swell   (very limited)  ~wetness   (slightly limited)	    1.00    0.29	Very limited -shrink-swell (very limited) -wetness (limited)	      1.00    0.95	(very limited)	    1.00    0.15	  Very limited  ~shrink-swell   (very limited) 	1.00	  Not limited   	
48C: Weller		  1.00    0.29    0.15	  Very limited  ~shrink-swell  (very limited)  ~wetness  (limited)  ~slope  (slightly limited)	  1.00    0.95    0.15	(very limited)	    1.00    0.83	  Very limited  ~shrink-swell   (very limited)   	1.00	  Not limited   	
54C: Harvester	  Moderately limited  ~shrink-swell   (moderately limited) 	!	  Moderately limited  ~shrink-swell   (moderately limited) 	      0.45   	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)	    0.68    0.45	  Moderately limited  ~shrink-swell   (moderately limited)	    0.45   	  Not limited   	
Urban land	  Not rated 	   	  Not rated 	   	  Not rated 	   	  Not rated 		  Not rated 	   

#### Building Site Development

Map symbol and soil name	  Dwellings without base	ements	Dwellings with basem	ents	  Small commercial buil	dings	Local roads and str	eets	   Lawns and landscap 	oing
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
54D: Harvester Urban land	<pre> ~slope   (limited)  ~shrink-swell   (moderately limited)</pre>	0.76	Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)  Not rated	        0.76    0.45 	  very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)    Not rated	      1.00    0.45   	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)    Not rated	0.63	Limited  ~slope   (limited)      Not rated	0.63
62: Edinburg	Very limited	      1.00    1.00	Very limited  -ponded (very limited)  -wetness (very limited)  -shrink-swell (very limited)	        1.00    1.00	  very limited  ~ponded (wetness)   (very limited)  ~wetness   (very limited)  ~shrink-swell   (very limited)	        1.00    1.00	Very limited   -ponded (wetness)   (very limited)   -wetness   (very limited)   -shrink-swell   (very limited)	        1.00    1.00	  very limited  ~wetness   (very limited)  ~ponded (wetness)   (very limited)  ~too clayey   (moderately limited)	    1.00    1.00    0.60
63B: Herrick	Very limited   ~shrink-swell   (very limited)   ~wetness   (moderately limited)	  1.00    0.59	  -wetness   (very limited)  -shrink-swell   (limited)	  1.00    0.90	  Very limited  ~shrink-swell   (very limited)  ~wetness   (slightly limited)  ~slope   (slightly limited)	  1.00    0.28    0.15	  Very limited  ~shrink-swell   (very limited)  ~wetness   (slightly limited)	  1.00    0.28	Slightly limited  ~wetness   (slightly limited)	  0.28     
67E: Menfro	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)	  0.83    0.45	Limited  ~slope   (limited)  ~shrink-swell   (slightly limited)	  0.83    0.15	  Very limited  ~slope   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	  Limited  ~slope   (limited)  ~shrink-swell   (moderately limited)	  0.84    0.45	  Limited  ~slope   (limited) 	0.84

#### Building Site Development

Map symbol and soil name	  Dwellings without base 	ements	   Dwellings with basem   	ents	  Small commercial build 	dings	   Local roads and str   	eets	   Lawns and landscap 	ing
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
70: Booker	Very limited	1.00	Very limited  -ponded  (very limited)  -shrink-swell  (very limited)  -flooding  (very limited)	Í	  Very limited  ~ponded (wetness)   (very limited)  ~flooding   (very limited)  ~shrink-swell   (very limited)	1.00	  very limited  ~ponded (wetness)   (very limited)  ~wetness   (very limited)  ~shrink-swell   (very limited)	      1.00    1.00 	  Very limited  ~wetness   (very limited)  ~ponded (wetness)   (very limited)  ~flooding   (very limited)	   1.00   1.00   1.00   1.00
71: Waldron	Very limited   ~flooding   (very limited)   ~shrink-swell   (very limited)   ~wetness   (moderately limited)	  1.00    0.59	Very limited  ~flooding  (very limited)  ~shrink-swell  (very limited)  ~wetness  (very limited)	  1.00    1.00    1.00	  Very limited  ~flooding   (very limited)  ~shrink-swell   (very limited)  ~wetness   (slightly limited)	  1.00    1.00    0.28	  Very limited  ~shrink-swell   (very limited)  ~flooding (rare)   (limited)  -wetness   (slightly limited)	  1.00    0.90    0.28	  Very limited  ~too clayey   (very limited)  ~wetness   (slightly limited)	  1.00    0.28   
72: Blake	Very limited   ~flooding   (very limited)   ~shrink-swell   (moderately limited)   ~wetness   (slightly limited)	  1.00    0.45    0.29	  Very limited  ~flooding   (very limited)  ~wetness   (limited)	  1.00    0.95	  Very limited  ~flooding   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45 	  Very limited  ~flooding   (very limited)  ~shrink-swell   (moderately limited)	ĺ	   Moderately limited   ~flooding   (moderately limited)   ~too clayey   (moderately limited)	0.60
73: Haynie	  Very limited  ~flooding   (very limited)	1.00	  Very limited  ~flooding   (very limited)	1.00	  Very limited  ~flooding  (very limited)	    1.00 	  Limited  ~flooding (rare)   (limited)	0.90	  Not limited 	
74: Carr	  Very limited  ~flooding   (very limited)	    1.00 	  Very limited  ~flooding   (very limited)	1.00	  Very limited  ~flooding   (very limited)	    1.00 	  Limited  ~flooding (rare)   (limited)	    0.90 	  Not limited   	

#### Building Site Development

Map symbol and soil name	  Dwellings without base 	ements	   Dwellings with basem   	ents	  Small commercial buil 	dings	   Local roads and str	eets	   Lawns and landscap 	oing
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
75: Hodge		  1.00   	  Very limited  ~flooding   (very limited)		  Very limited  ~flooding   (very limited) 	1.00	  Very limited  ~flooding   (very limited) 	  1.00   	  Very limited  ~flooding   (very limited)  ~droughty   (slightly limited)	1.00
76: Haynie		    1.00	  Very limited  ~flooding   (very limited)	      1.00	  Very limited  ~flooding   (very limited)	    1.00	  Very limited  ~flooding   (very limited)	    1.00	  Moderately limited  ~flooding   (moderately limited)	0.60
Blake		0.45	Very limited  ~flooding   (very limited)  ~wetness   (limited)	  1.00    0.95 	  Very limited  ~flooding   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45 	  Very limited  ~flooding   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45	Moderately limited  ~flooding   (moderately limited)  ~too clayey   (moderately limited)	0.60
77: Hodge		    1.00   	  Very limited  ~flooding   (very limited) 		  Very limited  ~flooding   (very limited) 	      1.00   	  Very limited  ~flooding   (very limited) 	    1.00   	  Very limited  ~flooding   (very limited)  ~droughty   (slightly limited)	  1.00    0.23
Blake		0.45	Very limited  ~flooding   (very limited)  ~wetness   (limited)		  Very limited  ~flooding   (very limited)  ~shrink-swell   (moderately limited)	  1.00    0.45 	(very limited)	Ϊ	  very limited   ~flooding   (very limited)   ~too clayey   (moderately limited)	  1.00    0.60 

#### Building Site Development

Map symbol and soil name	  Dwellings without bas   	ements	   Dwellings with basem   	ents	  Small commercial bui   	ldings	   Local roads and str   	reets	   Lawns and landscap 	oing
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
79: Dupo	  Very limited  ~flooding   (very limited)	1.00	  Very limited  ~flooding   (very limited)	İ	  Very limited  ~flooding   (very limited)		  Very limited  ~flooding   (very limited)	[	  Very limited  ~flooding   (very limited)	1.00
	<pre> ~shrink-swell   (very limited)  ~wetness   (moderately limited)  </pre>	1.00    0.59 	<pre>~wetness (very limited) /~shrink-swell (very limited)</pre>	1.00    1.00 	<pre> ~shrink-swell   (very limited)  ~wetness   (slightly limited)  </pre>	1.00	<pre>~shrink-swell  (very limited) ~wetness  (slightly limited)</pre>	1.00    0.28	<pre>~wetness  (slightly limited)  </pre>	0.28
80: Portage	  Very limited  ~wetness   (very limited)  ~ponded   (very limited)  ~shrink-swell   (very limited)	  1.00  1.00  1.00	  very limited  ~ponded  (very limited)  ~shrink-swell  (very limited)  ~flooding  (very limited)	  1.00    1.00    1.00	  Very limited  ~ponded (wetness)   (very limited)  ~flooding   (very limited)  ~shrink-swell   (very limited)	1.00	  Very limited  ~ponded (wetness)   (very limited)  ~wetness   (very limited)  ~shrink-swell   (very limited)	  1.00    1.00 	  very limited  ~wetness   (very limited)  ~ponded (wetness)   (very limited)  ~too clayey   (very limited)	  1.00    1.00    1.00
81: Haymond	  Very limited  ~flooding   (very limited)	1.00	  Very limited  ~flooding   (very limited)	1.00	  Very limited  ~flooding   (very limited)	1.00	  Very limited  ~flooding   (very limited)	1.00	  Moderately limited  ~flooding   (moderately limited)	0.60
82: Chequest	  Very limited  ~flooding   (very limited)  ~shrink-swell   (very limited)  ~wetness   (moderately limited)	  1.00    1.00    0.59	  Very limited  ~flooding  (very limited)  ~shrink-swell  (very limited)  ~wetness  (very limited)	1.00	  Very limited  ~flooding   (very limited)  ~shrink-swell   (very limited)  ~wetness   (slightly limited)	1.00	Very limited  ~flooding   (very limited)  ~shrink-swell   (very limited)  ~wetness   (slightly limited)	1.00	Moderately limited   ~flooding   (moderately limited)   ~too clayey   (moderately limited)   ~wetness   (slightly limited)	  0.60    0.60    0.28
83: Lomax	  Not limited 		  Not limited 		  Not limited 		  Not limited 		  Not limited 	
84: Blase	  Very limited  ~shrink-swell   (very limited)	    1.00 	  Moderately limited  ~shrink-swell   (moderately limited)	0.36	  Very limited  ~shrink-swell   (very limited)	1.00	  Very limited  ~shrink-swell   (very limited)	1.00	  Moderately limited  ~too clayey   (moderately limited)	0.60

#### Building Site Development

Map symbol and soil name	  Dwellings without basements		Dwellings with basements		Small commercial buildings		Local roads and streets		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
85: Carlow	  Very limited  ~wetness   (very limited)  ~flooding   (very limited)  ~shrink-swell   (very limited)	1.00	  Very limited  ~flooding   (very limited)  ~wetness   (very limited)  ~shrink-swell   (very limited)	1.00	  Very limited  ~flooding   (very limited)  ~wetness   (very limited)  ~shrink-swell   (very limited)	1.00	Very limited  ~wetness  (very limited)  ~flooding  (very limited)  ~shrink-swell  (very limited)	ĺ	  Very limited  ~wetness   (very limited)  ~flooding   (moderately limited)	1.00
86: Kampville	  very limited  ~flooding   (very limited)  ~shrink-swell   (very limited)  ~wetness   (moderately limited)	  1.00    1.00    0.59	  Very limited  ~flooding   (very limited)  ~wetness   (very limited)  ~shrink-swell   (very limited)	1.00	(very limited)	1.00	Very limited  ~flooding  (very limited)  ~shrink-swell  (very limited)  -wetness  (slightly limited)	11.00	  Moderately limited  ~flooding   (moderately limited)  ~wetness   (slightly limited)	0.60
90: Hurst	  Very limited  ~shrink-swell   (very limited)  ~wetness   (moderately limited)	  1.00    0.59	  very limited  ~wetness   (very limited)  ~shrink-swell   (very limited)	1.00	(very limited)	1.00	Very limited  ~shrink-swell   (very limited)   wetness   (slightly limited)	1.00	  Slightly limited  ~wetness   (slightly limited) 	0.28
91: Pits	    Not rated		    Not rated		    Not rated		Not rated		    Not rated	
AED: Orthent	  Not Rated    Not Rated		Not Rated Not Rated		  Not Rated 		Not Rated		Not Rated Not Rated	
M-W: Water	    Not rated 		    Not rated 		    Not rated 		    Not rated		Not Rated    Not rated	
W: Water	    Not rated 		    Not rated 		    Not rated		Not rated		    Not rated	